

graphic arts monthly

THE MAGAZINE OF THE PRINTING

U.S. MAIL PERMIT NO. 100
NEW YORK, N.Y.
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Web Offset
The Action Heats Up
In Ever-Changing Field

Literacy Issue Returns
Update on Chemical & Safety

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PRINTING AND IMAGING

Folders Key To New Webs

By Bill Eiler

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By Lisa Cross

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On The Cover: Photograph by Brad Hess. Courtesy American Signatures/Reynolds & Reynolds Incorporated.

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Export Stable 1990 After Shaky Start



The U.S. economy squeaked out an inflation-adjusted 1.1% annualized growth in the fourth quarter of 1989, based on the final revisions from the Commerce Department. Cahners Economics anticipated a very weak fourth quarter showing, so the slow growth did not alter our outlook. Our GNP forecast for 1990 remains at 2.0% real growth. That's weaker growth than in 1989, but far from recession levels.

The economy has just passed through its worst period, and quarterly annualized growth will characterize this year. The transition period, or soft landing, discussed by many economists actually began around mid-1989 and will last until mid-1990.

With transition periods come mixed economic signals; thus, confusion and uncertainty have been the order of the day. This uncertainty is reflected in the Conference Board's Index of Consumer Confidence which, in January of this year, dipped to its lowest level since June of 1987. Fourth quarter estimates of consumer spending also reveal hesitancy. Although disposable income grew a relatively healthy 2.6% in the fourth quarter, consumer spending was virtually unchanged from the third quarter.

Nevertheless, Cahners Economics is betting that steady improvement, particularly in the second half of 1990, will be the course of economic activity for the remainder of the year. Real growth in disposable income, for example, is expected to be weakest in the first half of 1990. Income will grow 1.1% in the first quarter and 1.7% in the second, compared to 2.4% and 3.1% growth in the latter quarters.

Similarly, employment growth will turn upward in the latter half of the year. After growing by just 450,000 in the first half of the year, 1.08%, 1.08 million new jobs will be added to the economy in the second half of the year.

Although you may hear a few more disappointing economic numbers for the early part of 1990, expect mild, but positive, growth in disposable income, employment, consumer spending, and retail sales this year. This may add up to an overall lackluster year for 1990, but signs point to a brighter 1991. Stronger growth is just around the corner.

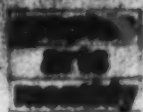
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In spite of some troubling inflation numbers in recent months, the economy is not headed for another inflationary spiral. The consumer price index increased just under 5% over the past 12 months; removing food and energy costs lowers that figure to 4.5%. Food and energy costs have been pushed up by temporary conditions, namely weather, and are likely to decline in the months ahead. In addition, producer prices are an indicator of future price hikes for consumer goods and they have moderated considerably. All of this should bring consumer prices down to the 4% range by the end of this year.

GENERAL ACTIVITY INDICATORS

	1989	1990	1991	1992	1993	1994
Gross Domestic Product (1)	3,009.3	3,054.4	3,111	3,170	3,230	3,290
Consumer Spending (2)	2,677.7	2,691.1	2,704.7	2,718	2,732	2,746
Personal Income (3)	2,527	2,574	2,618	2,661	2,704	2,747
Industrial Production (4)	1,049	1,124	1,192	1,261	1,330	1,400
Unemployment (5)	5.2	5.7	6.1	6.4	6.7	7.0
Consumer Price Index (6)	120.5	124.6	128.7	132.8	136.9	141.0
Industrial Production (7)	1,049	1,124	1,192	1,261	1,330	1,400
Consumer Price Index (8)	120.5	124.6	128.7	132.8	136.9	141.0
Industrial Production (9)	1,049	1,124	1,192	1,261	1,330	1,400
Consumer Price Index (10)	120.5	124.6	128.7	132.8	136.9	141.0
Industrial Production (11)	1,049	1,124	1,192	1,261	1,330	1,400
Consumer Price Index (12)	120.5	124.6	128.7	132.8	136.9	141.0
Industrial Production (13)	1,049	1,124	1,192	1,261	1,330	1,400
Consumer Price Index (14)	120.5	124.6	128.7	132.8	136.9	141.0
Industrial Production (15)	1,049	1,124	1,192	1,261	1,330	1,400
Consumer Price Index (16)	120.5	124.6	128.7	132.8	136.9	141.0
Industrial Production (17)	1,049	1,124	1,192	1,261	1,330	1,400
Consumer Price Index (18)	120.5	124.6	128.7	132.8	136.9	141.0
Industrial Production (19)	1,049	1,124	1,192	1,261	1,330	1,400
Consumer Price Index (20)	120.5	124.6	128.7	132.8	136.9	141.0

Source: U.S. Department of Commerce, Bureau of Economic Analysis. (1) GDP, (2) Personal Income, (3) Personal Income, (4) Industrial Production, (5) Unemployment, (6) Consumer Price Index, (7) Industrial Production, (8) Consumer Price Index, (9) Industrial Production, (10) Consumer Price Index, (11) Industrial Production, (12) Consumer Price Index, (13) Industrial Production, (14) Consumer Price Index, (15) Industrial Production, (16) Consumer Price Index, (17) Industrial Production, (18) Consumer Price Index, (19) Industrial Production, (20) Consumer Price Index.



East South Central Region

This region is actually a pairing of two diverse, though related, regions. Kentucky and Tennessee, the northern tier, are among what have traditionally been called border states; above them is middle America; below them is the Deep South. The eastern portions of both states are part of the Appalachian Mountains; the western portions border the plains sloping down toward the Mississippi River.

This transitional nature is reflected in their history during the Civil War (1861-1865). Kentucky remained in the Union and Tennessee did not. In general, however, and with a few above exceptions, Kentucky and Tennessee are usually thought of as part of the South. There is no question about the other two states in the region, Alabama and Mississippi. They are as characteristically Southern as, say, New England is characteristically Northeastern.

The South has been at the center of some of the more turbulent events in the country's history, notably the Civil War and Reconstruction, the Great Migration, and the



recent civil rights movement. Few people who have never been there have passionate opinions about Mississippi in a way they don't about, say, Idaho.

The South has, like New England, a strong regional identity. Most of this comes from the 18th and early 19th centuries, the centuries were primarily English, and the immigrants brought a certain sense of English identity. The region has been a center of American history, and it has been a center of American history. It has been a center of American history, and it has been a center of American history.

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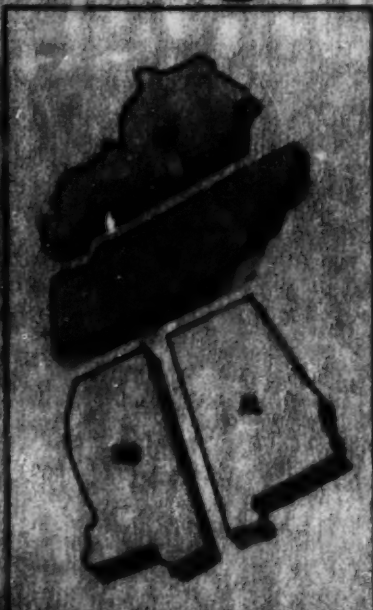
...the South has been a center of American history, and it has been a center of American history.

Commercial Printing

Value of Shipments

As noted on the opening page, this region is really composed of two regions, which have a variety of different characteristics. The first is the "old" South, which is the area that includes the states of Alabama, Georgia, Florida, and South Carolina. The second is the "new" South, which is the area that includes the states of Mississippi, Louisiana, Arkansas, and Texas. The "old" South is characterized by a long history of commercial printing, while the "new" South is characterized by a more recent history of commercial printing.

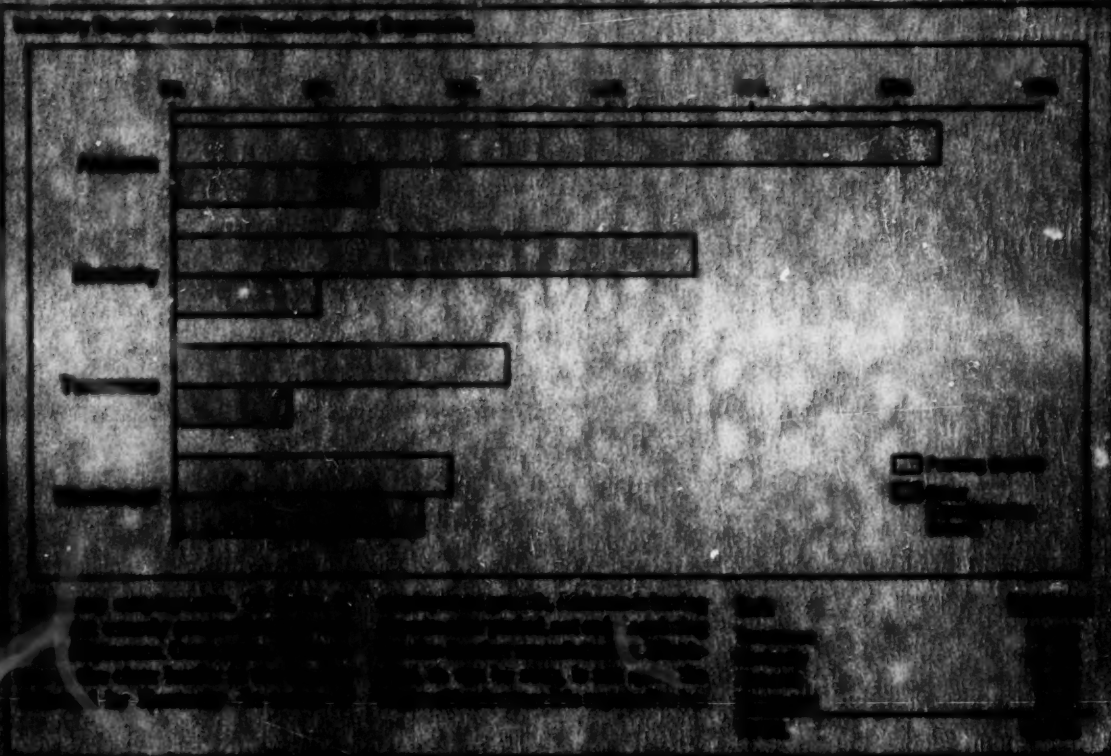
State	Value of Shipments
Alabama	100,000,000
Georgia	200,000,000
Florida	300,000,000
South Carolina	400,000,000
Mississippi	500,000,000
Louisiana	600,000,000
Arkansas	700,000,000
Texas	800,000,000



Printing Sites

The following table shows the number of printing sites in each state in the East-South-Central region. The data is as of 1990.

State	Number of Printing Sites
Alabama	100
Georgia	200
Florida	300
South Carolina	400
Mississippi	500
Louisiana	600
Arkansas	700
Texas	800



PRINT

Regional Overview

Note that these figures, taken from the GMA data base, reflect the universe of printers in the United States. Excluded from the data are those in Canada, yet included, universe of printers is small. That's because we're concerned with how the printing industry in this

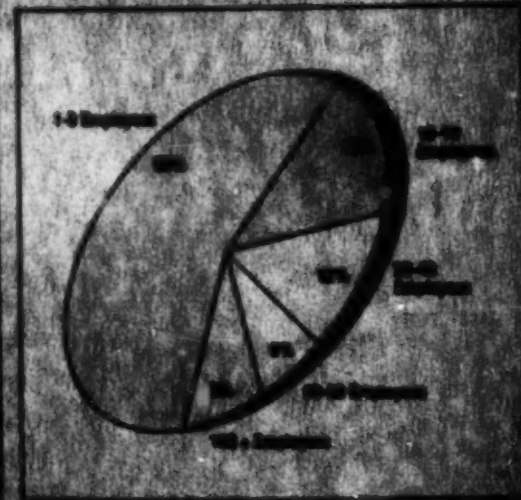
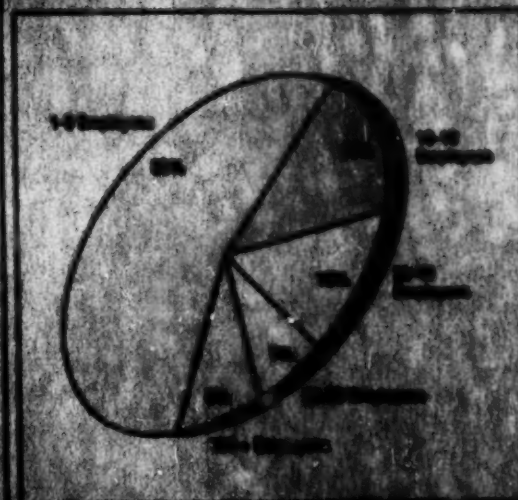
region is divided up by markets. This requires us to exclude newspapers, layout printers, and certain other plants (the wallpaper firm, for instance). These businesses, while clearly printers, are not necessarily associated with printing.

East Coast Census, Printers by Business Class

Business Class	1980	1981
Commercial	1,200	1,250
Industrial	1,100	1,150
Government	1,000	1,050
Education	900	950
Health	800	850
Other	700	750
Total	6,700	7,000

West Coast Census, Printers by Business Class

Business Class	1980	1981
Commercial	1,300	1,350
Industrial	1,200	1,250
Government	1,100	1,150
Education	1,000	1,050
Health	900	950
Other	800	850
Total	7,300	7,600



Overall, the East Coast Census region accounts for about 65% of the total U.S. printing, as measured by value of business goods which, with only minor exceptions, have about the same percentage of printing.

Business Class	1980	1981
Commercial	1,200	1,250
Industrial	1,100	1,150
Government	1,000	1,050
Education	900	950
Health	800	850
Other	700	750
Total	6,700	7,000

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Government	1,100	1,150
Education	1,000	1,050
Health	900	950
Other	800	850
Total	7,300	7,600

Here we have a sample of what the distribution of printers is like when we look at the total U.S. printing industry. The distribution is very similar to the one we saw in the East Coast Census. The only difference is that the total number of printers is much larger, and the distribution is more spread out. This is because the total U.S. printing industry includes many more types of printers, such as those in the newspaper and magazine industries, which are not included in the East Coast Census.

CONFIDENTIAL

Toll-free listing problems solved by order of several marketing plans. Toll-free easy from region to region.

[illegible][illegible]

Leading Printers in Major Markets

The image is a high-contrast, black and white scan of a document, likely a ledger or a form. It features a grid-like structure with multiple rows and columns. The text within the grid is mostly illegible due to the high contrast and noise. A prominent white curved line is visible near the top center, and a small white mark is near the bottom center. The overall appearance is that of a heavily degraded or low-quality scan of a printed document.

When you look at these pictures, you can see the difference between a good and a bad job. The good job is the one that is done right the first time. The bad job is the one that is done wrong the first time. The good job is the one that is done right the first time. The bad job is the one that is done wrong the first time.